Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-6. (Canceled)

7. (Currently Amended) A composition of matter comprising:

a) a reaction vessel having a transparent support at the bottom of said reaction vessel;

b) a coherent layer of fluorescently labeled biological cells applied to the transparent support;

c) a solution comprising a masking dye in the reaction vessel, the masking dye absorbing at least one of:

i) the excitation energy of any fluorescent dye in the solution; and

ii) the emission light of any fluorescent dye in the solution; and

d) ~~optionally~~ a fluorescent dye **dissolved** in the solution.

8. (Previously Presented) ~~The~~ **A** composition of matter ~~according to claim 7~~ **comprising:**

a) a reaction vessel having a transparent support at the bottom of said reaction vessel;

b) a coherent layer of fluorescently labeled biological cells applied to the transparent support;

c) a solution comprising a masking dye in the reaction vessel, wherein the masking dye is water-soluble and has no cytotoxic side effects**, the masking dye absorbing at least one of:**

i) the excitation energy of any fluorescent dye in the solution; and

ii) the emission light of any fluorescent dye in the solution; and

d) optionally a fluorescent dye in the solution.

9. (Previously Presented) A composition of matter comprising:

a) a reaction vessel having a transparent support at the bottom of said reaction vessel;

b) a coherent layer of fluorescently labeled biological cells applied to the transparent support;

c) a separating layer applied to the coherent layer of fluorescently labeled biological cells, the separating layer being permeable to a solution comprising a fluorescent dye, and the separating layer absorbing, reflecting or both absorbing and reflecting at least one of:

i) the excitation energy of the fluorescent dye in the solution; and

ii) the emission light of the fluorescent dye in the solution; and

d) optionally a solution comprising a fluorescent dye in the reaction vessel.

10. (Previously Presented) The composition of matter according to claim 9, wherein the separating layer comprises a layer of polymeric latex beads.

11. (Previously Presented) The composition of matter according to claim 10, wherein the polymeric latex beads are dyed with a masking dye.

12. (Previously Presented) The composition of matter according to claim 11, wherein the masking dye dyed on the polymeric latex beads is water-soluble and has no cytotoxic side effects.

13. (Previously Presented) A composition of matter comprising:

a) a reaction vessel having a transparent support at the bottom of said reaction vessel;

b) a coherent layer of fluorescently labeled biological cells applied to the transparent support;

c) a solution comprising a masking dye in the reaction vessel, the masking dye absorbing at least one of:

i) the excitation energy of any fluorescent dye in the solution; and

ii) the emission light of any fluorescent dye in the solution; and

d) a separating layer applied to the coherent layer of fluorescently labeled biological cells, the separating layer being permeable to a solution comprising a fluorescent dye, and the separating layer

absorbing, reflecting or both absorbing and reflecting at least one of:

i) the excitation energy of the fluorescent dye in the solution; and

ii) the emission light of the fluorescent dye in the solution; and

e) optionally a fluorescent dye in the solution.

14. (Previously Presented) The composition of matter according to claim 13, wherein the masking dye is water-soluble and has no cytotoxic side effects.

15. (Previously Presented) The composition of matter according to claim 13, wherein the separating layer comprises a layer of polymeric latex beads.

16. (Previously Presented) The composition of matter according to claim 15, wherein the polymeric latex beads are dyed with a masking dye.

17. (Previously Presented) The composition of matter according to claim 16, wherein the masking dye dyed on the polymeric latex beads is water-soluble and has no cytotoxic side effects.

18.-21. (Canceled)

22. (Previously Presented) A composition of matter comprising:

a) a reaction vessel having a transparent support at the bottom of said reaction vessel;

b) a layer of receptors specific for a fluorescent or luminescent ligand applied to or deposited on the transparent support; ~~and~~

c) a solution comprising a masking dye in the reaction vessel, the masking dye masking the fluorescence or luminescence of any unbound fluorescent or luminescent ligand in the solution; **and**

d) unbound fluorescent or luminescent ligand in the solution.

23. (Currently Amended) ~~The~~ A composition of matter ~~according to claim 22~~ **comprising:**

a) a reaction vessel having a transparent support at the bottom of said reaction vessel;

b) a layer of receptors specific for a fluorescent or luminescent ligand applied to or deposited on the transparent support; and

c) a solution comprising a masking dye in the reaction vessel, wherein the masking dye is water-soluble and has no cytotoxic side effects**, the masking dye masking the fluorescence or luminescence of any unbound fluorescent or luminescent ligand in the solution**.

24. (Previously Presented) A composition of matter comprising:

a) a reaction vessel having a transparent support at the bottom of said reaction vessel;

b) a layer of receptors specific for a fluorescent or luminescent ligand applied to or deposited on the transparent support; and

c) a separating layer applied to the layer of receptors specific for a fluorescent or luminescent ligand, the separating layer being permeable to a solution comprising the fluorescent or luminescent ligand, and the separating layer absorbing, reflecting or both absorbing and reflecting at least one of:

i) the excitation energy of any unbound fluorescent or luminescent ligand remaining in the solution comprising the fluorescent or luminescent ligand; and

ii) the fluorescence or luminescence of any unbound fluorescent or luminescent ligand remaining in the solution comprising the fluorescent or luminescent ligand.

25. (Previously Presented) The composition of matter according to claim 24, wherein the separating layer comprises a layer of polymeric latex beads.

26. (Previously Presented) The composition of matter according to claim 25, wherein the polymeric latex beads are dyed with a masking dye.

27. (Previously Presented) The composition of matter according to claim 26, wherein the masking dye dyed on the polymeric latex beads is water-soluble and has no cytotoxic side effects.

28. (Previously Presented) A composition of matter comprising:

a) a reaction vessel having a transparent support at the bottom of said reaction vessel;

b) a layer of receptors specific for a fluorescent or luminescent ligand applied to or deposited on the transparent support;

c) a solution comprising a masking dye in the reaction vessel, the masking dye masking the fluorescence or luminescence of any unbound fluorescent or luminescent ligand in the solution; and

d) a separating layer applied to the layer of receptors specific for a fluorescent or luminescent ligand, the separating layer being permeable to a solution comprising the fluorescent or luminescent ligand, and the separating layer absorbing, reflecting or both absorbing and reflecting at least one of:

i) the excitation energy of any unbound fluorescent or luminescent ligand remaining in the solution comprising the fluorescent or luminescent ligand; and

ii) the fluorescence or luminescence of any unbound fluorescent or luminescent ligand remaining in the solution comprising the fluorescent or luminescent ligand.

29. (Previously Presented) The composition of matter according to claim 28, wherein the masking dye is water-soluble and has no cytotoxic side effects.

30. (Previously Presented) The composition of matter according to claim 28, wherein the separating layer comprises a layer of polymeric latex beads.

31. (Previously Presented) The composition of matter according to claim 30, wherein the polymeric latex beads are dyed with a masking dye.

32. (Previously Presented) The composition of matter according to claim 31, wherein the masking dye dyed on the polymeric latex beads is water-soluble and has no cytotoxic side effects.

33.-43. (Canceled)